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(54) **ERGONOMIC SYSTEMS AND METHODS
PROVIDING INTELLIGENT ADAPTIVE
SURFACES AND TEMPERATURE CONTROL**

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(58) **Field of Classification Search** **36/28,**
36/29, 88, 93, 3 R, 1

See application file for complete search history.

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(57) **ABSTRACT**

Ergonomic systems which provide medical therapy, comfort and enhanced function are provided. Surfaces are provided with adjustable contour, transient force damping and temperature. The technologies are applied to footwear, seating surfaces and cryotherapy devices. The cooling and cryotherapy system employ an evaporator in close proximity to skin, and therefore employ methods to reduce risk of frostbite. Advanced control and power supply options are disclosed.

24 Claims, 35 Drawing Sheets

